

Remarks

Claims 1-25 are currently pending in the Application.

35 U.S.C. §102(e) rejection in view of Sakata (U.S. Patent No. 6,870,725)

Claim 19 stands rejected under 35 U.S.C. §102(e) as being anticipated by Sakata. Applicants respectfully disagree with this rejection.

As stated in the response dated January 27, 2004,

“the application of a prior art reference to a means or step plus function limitation requires that the prior art element perform the identical function specified in the claim. However, if a prior art reference teaches identity of function to that specified in a claim, then under *Donaldson* an examiner carries the initial burden of proof for showing that the prior art structure or step is the same as or equivalent to the structure, material, or acts described in the specification which has been identified as corresponding to the claimed means or step plus function. The “means or step plus function” limitation should be interpreted in a manner consistent with the specification disclosure... If the specification defines what is meant by the limitation for the purposes of the claimed invention, the examiner should interpret the limitation as having that meaning. If no definition is provided, some judgment must be exercised in determining the scope of the limitation.” See MPEP §2182.

Applicants submit that the Examiner has not complied with MPEP §2182 in that he has failed to provide an analysis or comparison of structures as required under *In re Donaldson Co.*, 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994). Applicants request the Examiner to comply with MPEP §2182 or withdraw the rejection.

35 U.S.C. §102(b) rejection in view of Noguchi (U.S. Patent No. 6,433,997)

Claims 18 and 21-24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Noguchi. Applicants respectfully disagree with this rejection.

MPEP 2131 quoting *Verdegaal Bros. V. Union Oil Co, of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) states “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described,

in a single prior art reference.” MPEP 2131 quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) states “[the] identical invention must be shown in as complete detail as is contained in the … claim.” Applicants submit that the Examiner has not shown that Noguchi teaches each and every element as set forth in the rejected claims as noted below.

Claim 18

Applicants submit that the Examiner has not shown that Noguchi discloses, suggests or teaches, *inter alia*, at least the following features recited by Claim 18 of the present application:

“providing a **battery sized** housing” (emphasis added)

The Examiner asserts that “a battery sized housing” as recited in Claim 18 is disclosed by Noguchi’s “vessel 2.” See page 3, line 2 of the Official Action. Applicants respectfully traverse the Examiner’s assertion.

As stated in the response dated January 27, 2004, there is no teaching or suggestion that Noguchi’s vessel “2” is “battery sized” as recited in Claim 18. According to the Examiner, Noguchi inherently teaches Applicants’ invention.

It is noted that the Examiner is making a factual assertion with respect to what the size is of Noguchi’s vessel “2.” Since the Noguchi reference does not indicate or suggest the size of vessel “2,” Applicants assume that the Examiner has made his assertion based on his personal knowledge.

When the Examiner bases a rejection on facts within his personal knowledge, the Applicants are entitled to require the Examiner to put the factual assertions in the form of an Affidavit. Please see 37 CFR 1.104(d)(2). Applicants hereby request that the Examiner comply with the rules of practice and put his factual assertions with respect to what is the size of Noguchi’s vessel “2” in Affidavit form. If the Examiner does not wish to do that then the Examiner must either cite a prior art

reference supporting his factual assertions or withdraw them.

Claim 21

Applicants submit that, at least for the reasons stated above for Claim 18, Noguchi does not teach, disclose or suggest a “**battery sized** energy storage device” (emphasis added) as recited in Claim 21. Hence, Claim 21 is patentable over Noguchi. Claims 22-24, at least based on their dependency on Claim 21, are also believed to be patentable over Noguchi.

If the Examiner insists on asserting that Noguchi inherently teaches Applicants’ invention, Applicants request that Examiner comply with the rules of practice and put his factual assertions in Affidavit form.

35 U.S.C. §103(a) rejection in view of Sakata and Harats (U.S. Patent No. 5,554,918)

Claims 1-17 and 20 stand rejected under 35 U.S.C. §103(a) as being obvious in view of Sakata and further in view of Harats.

I. Applicants submit that the Examiner has **not** established a *prima facie* case of obviousness for the claims rejected under 35 U.S.C. §103(a). Applicants note:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. **First, there must be some suggestion or motivation**, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. **Second, there must be a reasonable expectation of success**. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. **The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure**” (emphases added) *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicants submit that a *prima facie* case of obviousness has not been established for the reasons set forth below.

A. Applicants submit that there is no motivation in the prior art to combine the cited references as asserted by the Examiner.

One skilled in the art would not combine the Sakata and Harats references.

Applicants respectfully submit that there is no suggestion or motivation in either Sakata or Harats for their combination and how the features of the two devices could be combined so as to meet the structure as claimed in the present application. It has been found that “when the incentive to combine the teachings of the references is not readily apparent, it is the duty of the examiner to explain why combination of the teachings is proper. . . . Absent such reasons or incentives, the teachings of the references are not combinable” Ex parte Skinner, 2 USPQ2d 1788 (B.P.A.I. 1986). Applicants submit that the Examiner’s combination of Sakata and Harats is based upon a hindsight reconstruction of Applicants’ claims as opposed to what the references really suggest.

Sakata discloses a capacitor cell “20” that is rectangular in shape and is covered by “an outer package 22 in decompression state (i.e. a state in which the pressure is lower than the atmospheric pressure).” See column 7, lines 34-36 and Figure 3 of Sakata. Sakata’s invention was developed to deal with improving the performance of an electric, double layer capacitor by reducing equivalent series resistance (ESR). See column 2, lines 17-24 of Sakata. According to Sakata, one way to reduce (ESR) of the capacitor cell is by covering the capacitor cell with an outer package in a decompression state whereby a compressive force is always applied on the capacitor from the outside by atmospheric pressure. See column 1, lines 51-59 of Sakata.

Harats, discloses a cylindrically shaped battery that could be disassembled to allow the replacement of a zinc anode and cathode. See column 4, lines 10-13 of Harats. Harats is concerned with providing a mechanically-rechargeable single-cell battery for generating up to two volts, wherein mechanical recharging is effected by exchanging the zinc anode. See column 1, lines 6-11 of Harats.

The Examiner asserts that it “would have been obvious to one having ordinary skill in the art at the time the invention was made to use the battery housing of Harats et al. in Sakata et al. in order to enable the battery to be used in a device accepting standardized battery configuration and reduce the cost for the manufacture.” See page 5, lines 1-4 of the Office Action.

Applicants submit that one skilled in the art would not find any suggestion or motivation in the cited references as a whole to combine or modify the two devices disclosed in the cited references to meet the structure as claimed in the present application.

Sakata attempts to improve performance of the capacitor by reducing ESR. Harats mechanically recharges single-cell batteries by exchanging zinc anode. There is therefore no suggestion to combine these references by reading the references themselves. One skilled in the art trying to improve performance of the capacitor would not look to a reference dealing with mechanically recharging batteries. Similarly, one skilled in the art trying to mechanically recharge batteries would not look to a reference trying to improve the performance of a capacitor. Applicants submit that the only reason these references were cited was because the Examiner used the present claims as a road map.

As stated by the Federal Circuit: “[i]t is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious. One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.” *In re Fritch*, 972 F.2d 1260. Therefore, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness for the claims rejected under 35 U.S.C. §103(a) and Applicants respectfully request that the rejection be withdrawn and claims allowed.

B. Applicants submit that, even if it was possible to somehow combine the cited references, there is no evidence that the modified device would be satisfactory for its intended purpose.

Placing the capacitor cell disclosed in Sakata into the battery housing disclosed in Harats would render Sakata's capacitor cell unsatisfactory for its intended purpose.

According to MPEP §2143.01, if “proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).”

The Examiner states that it “would have been obvious to one skilled in the art at the time the invention was made to use the battery housing of Harats et al. in Sakata et al. in order to enable the battery to be used in a device accepting standardized battery configurations and reduce the cost for the manufacture.” See page 5, lines 1-4 of the Office Action. Applicants respectfully traverse the Examiner’s statements.

Sakata’s invention deals with improving performance of an electric double layer capacitor cell by reducing equivalent series resistance (ESR). See column 2, lines 17-24 of Sakata. As stated above, according to Sakata, ESR of the capacitor is decreased when the capacitor cell is covered by an outer package in a decompression state due to a compressive force that is always applied on the capacitor from the outside by an atmospheric pressure. See column 1, lines 51-59 of Sakata.

By placing Sakata’s capacitor cell into Harats’ battery housing, one skilled in the art would remove the compressive force that is applied on the capacitor from the outside by atmospheric pressure and thereby increase the ESR of Sakata’s capacitor thus reducing its intended performance. Reducing the intended performance of the Sakata’s capacitor would render Sakata’s invention unsatisfactory for its intended purpose.

Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness for the claims rejected under 35 U.S.C. §103(a). Therefore, Applicants respectfully request that the rejection be withdrawn and claims allowed.

C. Applicants submit that, even if it was possible to somehow combine the cited references, a reasonable expectation of success is not found in the prior art.

There is no reasonable expectation of success that the modified device of Sakata and Harats as proposed by the Examiner would work.

According to MPEP §2143.02, the “prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).” Applicants submit that there is no suggestion by the Examiner or in the cited references of a reasonable expectation of success in placing Sakata’s capacitor into Harats’ battery housing. On the contrary, as stated above, the placing of Sakata’s capacitor into Harats’ battery housing would reduce the intended performance of the Sakata capacitor.

Further, as stated above, Sakata discloses a rectangular capacitor and Harats discloses a cylindrical battery housing. To combine the cited references as suggested by the Examiner would require placing the rectangular capacitor disclosed in Sakata into the cylindrical housing disclosed in Harats. Applicants do not understand why the Examiner believes that there would be a reasonable expectation of success in trying to place the rectangular capacitor disclosed in Sakata into the cylindrical housing disclosed in Harats. Placing a rectangular capacitor into a cylindrical housing would obviously require that the capacitor be somehow held in place inside the housing to prevent the capacitor from moving around. Applicants respectfully submit that neither Sakata nor Harats disclose any means for holding the capacitor in place inside the cylindrical housing. Therefore, there is no reasonable expectation of success in trying to place a rectangular capacitor into a cylindrical housing and the Applicants thus request that the Examiner withdraw the rejection.

Additionally, Sakata's capacitor cell "20" has two parallel terminals "25" protruding from the same side of the capacitor cell "20." See Figure 3 of Sakata. Harats' battery housing has a terminal on top of the battery's housing and another terminal on the opposite side of the battery's housing. To combine the cited references as suggested by the Examiner would require routing the parallel terminals "25" of Sakata to opposite terminals on the battery's housing. Applicants do not understand why the Examiner believes that there would be a reasonable expectation of success in combining these two references given the terminal placement issue. Further, the rerouting of parallel terminals "25" to opposite terminals on the battery's housing obviously requires additional electrical conducting means. Applicants respectfully submit that neither Sakata nor Harats disclose any such electrically conducting means. Therefore, there is no reasonable expectation of success in routing the parallel terminals "25" to opposite terminals on the battery's housing. Hence, Applicants request that the Examiner withdraw the rejection.

Because there is no motivation in the prior art to combine the cited references, because there is no evidence that the modified device would be satisfactory for its intended purpose even if it was possible to combine the cited references, and because a reasonable expectation of success is not found in the prior art, the Examiner's attempt to combine the Sakata reference and the Harats reference is improper and is not allowed under the MPEP.

For the reasons set forth above, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness of the claims rejected under 35 U.S.C. §103(a). Therefore, Applicants respectfully request that the rejection be withdrawn and claims allowed.

II. In addition to the foregoing, it would not be obvious to combine the cited references for the following reasons.

A. Applicants submit that a *prima facie* case of obviousness has not been established because Sakata and Harats teach away from their combination.

According to MPEP §2143.01, “where the teachings of two or more prior art references conflict, the Examiner must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. *In re Young*, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991).”

As stated above, Sakata deals with improving the performance of the capacitor cell by reducing ESR. According to Sakata, the capacitor cell “20” is covered by an outer package “22” wherein the pressure in the package “22” is lower than the atmospheric pressure. See column 7, lines 34-36 of Sakata. Sakata teaches that the compressive forces generated due to the atmospheric pressure decrease the ESR of a capacitor cell. See column 1, lines 51-57 of Sakata.

Harats, on the other hand, does not disclose that the contents within the battery’s housing are under atmospheric pressure. On the contrary, Harats teaches that the battery’s housing can be taken apart to be able to replace battery’s anode and cathode that are disposed within batteries housing.

The Examiner asserts that one skilled in the art would use Harat’s battery housing for Sakata’s capacitor cell. See page 5, lines 1-4 of the Office Action. Why would one skilled in the art replace the depressurized package disclosed in Sakata with a package whose contents are under atmospheric pressure? The teachings are in opposition. Applicants submit that the Examiner’s combination of Sakata and Harats is based upon a hindsight reconstruction of Applicants’ claims as opposed to what the references really suggest. Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness. The combination of the cited references is improper because they teach away from their combination. Therefore, Applicants respectfully request that the rejection be withdrawn and claims allowed.

B. Applicants further submit that a *prima facie* case of obviousness has not been established because Harats reference is non-analogous art.

According to MPEP §2143.01, “the test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in **analogous arts**” (emphasis added).

“In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” In re Oetiker, 977 F.2d 1443, 1446.

Harats is non-analogous art because it is not in the field of applicant’s endeavor. Harats teaches a nickel-zinc based battery with a removable anode and cathode. See column 3, line 62 and column 4, lines 10-13 of Harats. On the other hand, the present application relates to a capacitor. Why would one skilled in the art look to a nickel-zinc based battery when trying to improve a capacitor? Applicants submit that Harats’ teaching of a nickel-zinc based battery with a removable anode and cathode is not in the field of Applicants’ endeavor.

Harats is further non-analogous art because it is not reasonably pertinent to the particular problem with which the inventor was concerned. “A reference is reasonably pertinent if ... it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” See In re Clay, 966 F.2d 656, 659. Applicants submit that Harats is not reasonably pertinent to the present device as claimed because a nickel-zinc based battery does not in any fashion deal with a capacitor. It would therefore not have logically commended itself to an inventor’s attention in considering the problem of improving a capacitor. Why would one skilled in the art look to a nickel-zinc based battery when trying to improve a capacitor?

It is Applicants' belief that the only reason Harats was cited was because the Examiner has performed an *ex post facto* analysis of Applicants' claims. Harats is non-analogous art and a person trying to improve a capacitor would not look to it.

Because there is no motivation in the cited references teach away from their combination and because Harats is a non-analogous art, the Examiner attempt to combine the Sakata reference and the Harats reference is once again improper and is not allowed under the MPEP.

For the reasons set forth above, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness for the claims rejected under 35 U.S.C. §103(a). Therefore, Applicants respectfully request that the rejection be withdrawn.

35 U.S.C. §103(a) rejection in view of Noguchi and O'Phelan (U.S. Patent No. 6,509,588)

Claim 25 stands rejected under 35 U.S.C. §103(a) as being obvious in view of Noguchi and further in view of O'Phelan.

Applicant submits that Claim 25, at least based upon its dependency on Claim 21, is patentable over Noguchi and O'Phelan, because (A) there is no *prima facie* 35 U.S.C. §102(b) case based on Noguchi, as shown above, and (B) the Examiner has not shown to the Applicants where O'Phelan discloses, teaches or suggests the features not found in Noguchi and claimed by Applicants.

The Examiner is encouraged to contact the undersigned to discuss any other issues requiring resolution.

Conclusion

In view of the above, reconsideration and allowance of all the claims are respectfully solicited.

The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 50-3367. In particular, if this response is not timely filed, then the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136 (a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 50-3367.

I hereby certify that this correspondence is being deposited with the United States Post Office with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents POB 1450, Alexandria, VA 22313-1450 on

12/14/05
(Date of Deposit)

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Respectfully submitted,

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